

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A microphone assembly comprising:
a microphone housing unit having a cover and a base;
a preamplifier circuit assembly fixedly attached to the base and protected by the cover, the preamplifier circuit assembly having at least one terminal unprotected by the cover; and
a radio frequency interference suppression device electrically coupled to the preamplifier circuit, wherein the radio frequency interference suppression device includes:
at least one internal ground electrically coupled to the at least one terminal, and wherein the at least one internal ground provides a ground path between the cover and the base.
2. (original) The microphone assembly of claim 1 further comprising:
a mounting frame fixedly attached to the base and adapted to support the preamplifier circuit assembly.
3. (original) The microphone assembly of claim 2, wherein the preamplifier circuit assembly is fixedly attached to the mounting frame using an adhesive.
4. (original) The microphone assembly of claim 3, wherein the adhesive is a conductive material.
5. (original) The microphone assembly of claim 2, wherein the adhesive includes a plurality of metallic flakes suspended therein.
6. (original) The microphone assembly of claim 1, wherein the at least one internal ground includes a first internal ground communicatively coupled to the base, and a second internal ground communicatively coupled to the cover.
7. (Previously presented) A microphone assembly comprising:
a microphone housing base adapted to support a diaphragm assembly within an interior;

a mounting frame fixedly attached to the microphone housing base and adapted to support a preamplifier circuit assembly having an external ground, wherein the preamplifier circuit assembly and the diaphragm assembly are electrically connected;

a microphone housing cover adapted to enclose the preamplifier circuit assembly;

a first internal ground electrically coupled to the microphone housing cover and the external ground; and

a second internal ground electrically coupled to the microphone housing base and the first internal ground, wherein the first internal ground and the second internal ground cooperate with the microphone housing base and the microphone housing cover to suppress radio frequency interference.

8. (original) The microphone assembly of claim 6, wherein the preamplifier circuit assembly is electrically connected to the mounting frame using an adhesive.

9. (original) The microphone assembly of claim 8, wherein the adhesive is a conductive material.

10. (original) The microphone assembly of claim 9, wherein the adhesive includes a plurality of metallic flakes suspended therein.

11 – 18 (canceled).

19. (Previously presented) A transducer assembly comprising:
a housing having a cover and a base, the housing defining an interior and an exterior;
a transducer assembly operatively disposed within the interior;
a mounting frame assembly secured to the base, and at least partially disposed within the interior;
a preamplifier circuit assembly coupled to the mounting frame assembly, the preamplifier circuit assembly having at least one terminal disposed on the exterior, and the preamplifier circuit assembly being electrically coupled to receive an output of the transducer; and
at least a first ground path, the first ground path electrically, conductively coupling the preamplifier assembly, the mounting frame and the base.

20. (Previously presented) The transducer assembly of claim 19, wherein the mounting frame comprises a conductive portion, the conductive portion forming a portion of the first ground path.

21. (Previously presented) The transducer assembly of claim 19, comprising a second ground path electrically, conductively coupling the preamplifier assembly to the cover.

22. (Previously presented) The transducer assembly of claim 19, comprising a second ground path electrically, conductively coupling the terminal, the mounting frame and the preamplifier assembly.

23. (Previously presented) The transducer assembly of claim 22, wherein the mounting frame comprises a conductive portion, and the conductive portion forming a portion of the second ground path.

24. (Previously presented) The transducer assembly of claim 19, comprising a second ground path electrically, conductively coupling the preamplifier assembly to the cover and a third ground path electrically, conductively coupling the terminal, the mounting frame and the preamplifier assembly.

25. (Previously presented) The transducer assembly of claim 24, wherein the mounting frame comprises a conductive portion, and the first ground path and the third ground path each comprise the conductive portion.

26. (Previously presented) The transducer assembly of claim 19, wherein the preamplifier circuit assembly is fixedly attached to the mounting frame using a conductive adhesive, the conductive adhesive forming a portion of the first ground path.

27. (Previously presented) The transducer assembly of claim 19, wherein the mounting frame is fixedly attached to the base using a conductive adhesive, the conductive adhesive forming a portion of the first ground path.

28. (Previously presented) The transducer assembly of claim 19, the first ground path comprising at least one solder connection.

29. (Previously presented) The transducer assembly of claim 19, the first ground path being disposed in the interior.

30. (Previously presented) A transducer assembly comprising:

a housing having a cover and a base, the housing defining an interior and an exterior;

a transducer assembly operatively disposed within the interior;

a mounting frame assembly secured to the base;

a preamplifier circuit assembly coupled to the mounting frame assembly, the preamplifier circuit assembly having at least one terminal exposed externally of the housing, and the preamplifier circuit assembly being electrically coupled to receive an output of the transducer; and

a first ground path, the first ground path electrically, conductively coupling the preamplifier assembly, the mounting frame and the base, a second ground path electrically, conductively coupling the preamplifier assembly to the cover and a third ground path electrically, conductively coupling the terminal, the mounting frame and the preamplifier assembly.

31. (Previously presented) The transducer assembly of claim 30, wherein the mounting frame comprises a conductive portion, and the first ground path and the third ground path each comprises the conductive portion.

32. (Previously presented) The transducer assembly of claim 30, wherein the preamplifier circuit assembly is fixedly attached to the mounting frame using a conductive adhesive, the conductive adhesive forming a portion of each of the first and the third ground paths.

33. (Previously presented) The transducer assembly of claim 30, wherein the mounting frame is fixedly attached to the base using a conductive adhesive, the conductive adhesive forming a portion of each of the first and the third ground paths.

34. (Previously presented) The transducer assembly of claim 30, any one of the first ground path, the second ground path or the third ground path comprises at least one solder connection.

35. (Previously presented) The transducer assembly of claim 30, at least one of the first ground path, the second ground path or the third ground path being disposed in the interior.

36. (Previously presented) The transducer assembly of claim 30, the first ground path and the third ground path being disposed in the interior.